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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/661,834	06/11/1996	JOSEPH P. KRONZER	45751USA6C	7134

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EXAMINER	
LEWIS, AARON J	

ART UNIT	PAPER NUMBER
3761	29

DATE MAILED: 05/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	08/661,834	KRONZER ET AL.	
	Examiner	Art Unit	
	AARON J. LEWIS	3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 June 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *25-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *25-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 25-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dyrud et al.('619).

As to claim 25, Dyrud et al.('619) disclose a fibrous face mask (figs.1-3) for filtering contaminants and/or particulate matter, which comprises: a means (12) for securing the mask to the face of a wearer; and a non-woven fibrous layer (disclosed as a shaping layer) attached (col.3, lines 13-15) to the securing means and containing at least about 40% weight thermally bonding fibers based on the weight of the in the non-woven fibrous layer, at least about 10% weight of the fibers in the non-woven layer being bicomponent fibers, and optionally staple fibers, the non-woven fibrous layer being molded in a cup-shaped configuration. As for the claimed weight ratios of at least 40% weight thermally bonding fibers and at least 10% weight bicomponent fibers in the non-wovwn layer, applicant is referred to Dyrud et al. (col.4, lines 29-37) which discloses weight ratios ranging from 0% staple fibers:100% bicomponent fibers to 75% staple fibers:25% bicomponent fibers, a range which includes the claimed values of 40% thermally bonding fibers and 10% bicomponent fibers.

As for the claimed "surface fuzz value" of not less than 7.5, since Dyrud et al. disclose thermally bonding fibers having bicomponent fibers as well as staple fibers (col.4, lines

29-37)in a plurality weight percent ratios which includes 40 wt.% thermally bonding fibers and at least about 10 wt.% bicomponent fibers, it is submitted that the process of molding which includes the use of heat as disclosed by Dyrud et al. would have resulted in a shaping layer having a surface fuzz value inlcluding one which is not less than 7.5.

As to claim 26, Dyrud et al. as discussed above disclose a wide range of weight percent of fibers making up the non-woven layers which include the claimed weight per cent of fibers. Moreover, Dyrud et al. disclose a plurality of non-woven layers having filtration layer of blown microfibers therebetween (fig.2 and col.6, line 63-col.7, line 20).

As to claims 27-31, and claims 33-37, the particular values of weight per cent of the bicomponent fibers in Dyrud et al. can be arrived at through mere routine experimentation and observation with no criticality seen in the particular values being claimed. The surface fuzz values resulting from the heated molding process disclosed by Dyrud et al. and a given proportion of specific fibers would result in a shaping layer having a plurality of surface fuzz values in dependence upon the particular selection of fibers.

Claim 32 with the exception of the optional inclusion of staple fibers is substantially equivalent in scope to claim 25 and is included in Dyrud et al. for the reasons set forth above with respect to claim 25.

In the response to Appellants' Request for Rehearing, the Board of Appeals interpreted the scope of claim 25 as defining four different face masks, two of which are as follows:

1. A non-woven fibrous layer (disclosed as a shaping layer) attached (col.3, lines 13-15) to the securing means and containing (i) at least about 40 wt.% thermally bonding fibers based on the weight of the fibers in the non-woven fibrous layer, at least 10 wt. % of the fibers in the non-woven fibrous layer being bicomponent fibers, the non-woven fibrous layer being molded in a cup-shaped configuration and having a surface fuzz factor of not less than 7.5 after being subjected to a surface fuzz abrasion test. As for the claimed weight ratios of at least 40% weight thermally bonding fibers and at least 10% weight bicomponent fibers in the non-wovwn layer, applicant is referred to Dyrud et al. (col.4, lines 29-37) which discloses weight ratios ranging from 0% staple fibers:100% bicomponent fibers to 75% staple fibers:25% bicomponent fibers, a range which includes the claimed values of 40% thermally bonding fibers and 10% bicomponent fibers. As for the claimed "surface fuzz value" of not less than 7.5, since Dyrud et al. disclose thermally bonding fibers having bicomponent fibers as well as staple fibers (col.4, lines 29-37)in a plurality weight percent ratios which includes 40 wt.% thermally bonding fibers and at least about 10 wt.% bicomponent fibers, it is submitted that the process of molding which includes the use of heat as disclosed by Dyrud et al. would have resulted in a shaping layer having a surface fuzz value inlcluding one which is not less than 7.5.

2. The non-woven fibrous layer recited in (1) further comprising staple fibers. As for the claimed weight ratios of at least 40% weight thermally bonding fibers and at least 10% weight bicomponent fibers in the non-wovwn layer, applicant is referred to Dyrud et al. (col.4, lines 29-37) which discloses weight ratios ranging from 0% staple fibers:100%

bicomponent fibers to 75% staple fibers:25% bicomponent fibers, a range which includes the claimed values of 40% thermally bonding fibers and 10% bicomponent fibers.

In the response to Appellants' Request for Rehearing, the Board of Appeals interpreted the scope of claim 32 as defining two different fibrous layers, at least one as follows:

1. A nonwoven fibrous layer attached to the harness and containing at least 40 weight percent thermally bonding fibers based on the weight of the fibers in the nonwoven fibrous layer, at least 10 weight percent of the fibers in the nonwoven fibrous layer being bicomponent fibers, the nonwoven fibrous layer being molded in a cup-shaped configuration and having a surface fuzz value of not less than 7.5 after being subjected to a surface fuzz abrasion test. As for the claimed weight ratios of at least 40% weight thermally bonding fibers and at least 10% weight bicomponent fibers in the non-wovwn layer, applicant is referred to Dyrud et al. (col.4, lines 29-37) which discloses weight ratios ranging from 0% staple fibers:100% bicomponent fibers to 75% staple fibers:25% bicomponent fibers, a range which includes the claimed values of 40% thermally bonding fibers and 10% bicomponent fibers. As for the claimed "surface fuzz value" of not less than 7.5, since Dyrud et al. disclose thermally bonding fibers having bicomponent fibers as well as staple fibers (col.4, lines 29-37)in a plurality weight percent ratios which includes 40 wt.% thermally bonding fibers and at least about 10 wt.% bicomponent fibers, it is submitted that the process of molding which includes the use of heat as disclosed by Dyrud et al. would have resulted in a shaping layer having a surface fuzz value inlcluding one which is not less than 7.5.

Response to Arguments

3. Applicant's arguments filed 06/04/2002 have been fully considered but they are not persuasive.

Applicants' arguments including the Kronzer Declaration which seek to establish that the surface fuzz values obtained from testing six mask samples of Example 26 of Table I of the instant specification never exceeded 8.0 are persuasive; however, the alternative language (as outlined by the Board of Appeals in the Resonse to Appellants' Request for Rehearing, pages 4 and 5) which is employed in each of claims 25 and 32 (i.e. "with the proviso") does not limit the surface fuzz value to an amount which greater than 8.0 as argued. Accordingly, inasmuch as claims 25 and 32 define a fibrous filtration face mask having surface fuzz value which is either 7.5 or greater than 8.0, Dyrud et al. continue to be a valid prior art reference which is properly readable upon claims 25-37.

Applicants' arguments regarding the inherency of the fuzz value of the Dyrud et al. mask is persuasive with respect to a surface fuzz value which exceeds 8.0; however, as to face masks having fuzz values of 7.5-8.0, even a mask made by the Dyrud et al. methods does produce masks having surface fuzz values of 8.0 as established in Table I of the instant specification and as established in the Kronzer declaration as accompanying pages of laboratory notebook.

As to applicants' arguments regarding the selection of a particular amount of a given constituent from a disclosed range, it is submitted that one of ordinary skill having the Dyrud et al. disclosure would be free to choose an amount of a constituent from the disclosed range. The selection of a particular amount of a constituent including 40 wt.%

thermally bonding fibers and 10 wt.% bicomponent fibers would have been an obvious matter of design choice in dependence upon the desirability of one of ordinary skill to achieve such desired results as greater filtration, rigidity of shape and increased comfort.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON J. LEWIS whose telephone number is (703) 308-0716. The examiner can normally be reached on 9:30AM-6:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WEILUN LO can be reached on (703) 308-1957. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 305-3590 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

AARON J. LEWIS
Primary Examiner
Art Unit 3761

Aaron J. Lewis
May 10, 2003